

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/607,434	06/26/2003	Mark P. Anstadt	1034448-000007 5213			
21839 DIJCHANAN	7590 12/17/2008 INCERSOLL & POONE	EXAMINER				
BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404			OROPEZA, FRANCES P			
ALEXANDRI	ALEXANDRIA, VA 22313-1404			PAPER NUMBER		
			3766			
				<u> </u>		
			NOTIFICATION DATE	DELIVERY MODE		
			12/17/2008	ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

•	Application No.	Applicant(s)	_
Corrected	10/607,434	ANSTADT ET AL.	
Notice of Allowability	Examiner	Art Unit	_
	FRANCES P. OROPEZA	3766	
The MAILING DATE of this communication at All claims being allowable, PROSECUTION ON THE MERITS herewith (or previously mailed), a Notice of Allowance (PTOLNOTICE OF ALLOWABILITY IS NOT A GRANT OF PATEN of the Office or upon petition by the applicant. See 37 CFR 1.	S IS (OR REMAINS) CLOSED in the -85) or other appropriate communic TRIGHTS. This application is subjudiated and MPEP 1308.	s application. If not included ation will be mailed in due course. THIS	е
1. This communication is responsive to Notice of Allowan		,	
2. X The allowed claim(s) is/are <u>132,134-149,156,157,159-</u>	<u>162,245-252 and 256-277</u> .		
 3. Acknowledgment is made of a claim for foreign priority a) All b) Some* c) None of the: 1. Certified copies of the priority documents in the certified copies of the priority documents in the certified copies of the priority documents in the certified copies of the priority international Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DA' noted below. Failure to timely comply will result in ABANDO THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be surfaced in the company of the certification (PTO-152) which 5. CORRECTED DRAWINGS (as "replacement sheets") (a) including changes required by the Notice of Drafts 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Exami Paper No./Mail Date (b) including changes required by the attached Exami Paper No./Mail Date (ceach sheet. Replacement sheet(s) should be labeled as such attached Examiner's comment regarding REQUIREMENT. 	nave been received. nave been received in Application Now documents have been received in TE" of this communication to file a submitted. Note the attached EXAMI gives reason(s) why the oath or demust be submitted. person's Patent Drawing Review (submitted). ner's Amendment / Comment or in TER 1.84(c)) should be written on the communication in the header according to 37 CFR 1.84(c)) should be written on the communication in the header according to 37 CFR 1.84(c)) should be written on the communication of BIOLOGICAL MATER	this national stage application from the eply complying with the requirements NER'S AMENDMENT or NOTICE OF claration is deficient. PTO-948) attached the Office action of lrawings in the front (not the back) of .121(d). AL must be submitted. Note the	
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9	48) 6. ☐ Interview Sum Paper No./Ma 7. ⊠ Examiner's An	il Date	
/Frances P. Oropeza/ Patent Examiner, Art Unit 3766 December 10, 2008			

Application/Control Number: 10/607,434

Art Unit: 3766

ALLOWANCE

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview between Brian P. O'Shaughnessy and Frances P. Oropeza on 9/29/08.

Claims 159, 160, 161, 162 and 265 have been amended. The claims as amended are provided, and portions of the claims that have been deleted and inserted are highlighted after the amended claim.

Relative to claim 159: -- The method of claim 245, wherein said command instruction instructs delivery of a first therapeutic agent.--

("process as recited in", "131", "exporting of said at least one" and "the" have been deleted, and --method of-- and --245-- have been inserted)

Relative to claim160: --The method of claim 159, wherein said first therapeutic agent is selected from the group consisting of anti-inflammatory agents, gene therapy agents, gene transfer agents, stem cells, chemo-attractants, cell regeneration agents, ventricular remodeling agents, anti-infection agents, tumor suppressants, tissue and/or cell engineering agents, imaging contrast agents, tissue staining agents, nutrients, and mixtures thereof.—

Application/Control Number: 10/607,434

Art Unit: 3766

("process as recited in" has been deleted, and "method of" has been inserted)

Relative to claim 161: -- The method of claim 245, wherein said command instructs delivery of a first regenerative agent.—

("process as recited in", "131", "exporting of said at least one" and "the" have been deleted, and --method of-- and --245-- have been inserted)

Relative to claim 162: The method of claim 161, wherein said first regenerative agent is selected from the group consisting of tissue scaffold materials, biochemical materials, stem cells, and electrical stimulation.

("process as recited in" has been deleted, and "method of" has been inserted)

Relative to claim 265: -- A method of treating a patient requiring heart function assistance or therapy comprising:

- 1) connecting the patient to a cardiac assist device, said device comprising:
 - a) a cup having a compliant exterior wall joined to a compliant interior rolling diaphragm liner continuously along two circumferential lines forming a continuous annular cavity between said wall and said liner, wherein the liner comprises a tapered unbonded transition section reducing in thickness to a thin section, said cup configured to encompass, and to seal and conform to said heart from apex to atrio-ventricular groove throughout systolic and diastolic actuation by imposing negative pressure between said cup and said heart; and b) a drive system in closed fluid communication with said cavity to effect displacement of said cavity;
 - c) a sensor; and

Application/Control Number: 10/607,434

Art Unit: 3766

- d) a control system in communication with said drive system and with said sensor;
- 2) collecting data from said sensor and importing said data into said control system;
- 3) using an algorithm to formulate a command instruction from said control system in response to said data; and
- 4) exporting said command instruction from said controller to said drive system to effect displacement of said annular cavity, and wherein said displacement actively supports systolic and diastolic actuation of the heart.
- (in 1) a) --wherein the liner comprises a tapered unbonded transition section reducing in thickness to a thin section--, and --throughout systolic and diastolic actuation by imposing negative pressure between said cup and said heart-- have been inserted)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fran Oropeza whose telephone number is (571) 272-4953.

Fran's schedule is Monday and Tuesday 9AM-7PM EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl. H. Layno can be reached on (571) 272-4949. Carl's schedule is Monday, Wednesday, Friday 9AM-5 PM EST; Tuesday, Thursday 9AM-3PM and 9PM-11PM EST. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular communication and for After Final communications.

Application/Control Number: 10/607,434 Page 5

Art Unit: 3766

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Frances P. Oropeza/ Patent Examiner, Art Unit 3766 December 10, 2008

> CARL H. LAYNO SUPERVISORY PATENT EXAMINER

Carl N. Lagro

5,222,971

Page 2

U.S. PA	TENT DOCUMENTS	4,913,141 4,921,484	4/1990 5/1990	Hillstead
	Shimada et al 128/344	4,950,227	8/1990	Savin et al 604/8 King et al 623/1
	Leveen et al	4,998,539	3/1991	Delsanti 128/898
4,856,516 8/1989	Hillstead 128/343	5,002,560	3/1991	Machold et al 604/95 Burton et al 606/108
	Hsu et al 604/266 Lindemann et al 623/1	5,034,001	7/1991	Garrison et al 604/53
	Hillstead 604/22 Lee 604/266			Zilber 604/8 Garrison 604/104